

REMARKS

Claims 1-22 are pending in the subject application. Claims 6 and 18 have been cancelled. Claims 1, 4, 7, 14, 19, and 21-22 have been amended to correct claim dependencies in lieu of the cancelled claims and to clarify the claimed invention. The specification has been amended to correct typographical and clerical errors and to insert information not previously available. Thus, no new matter has been added by the above amendments.

Claims 1-4, 7, and 11-12

Claims 1-4, 7, and 11-12 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Dieckman, D. et al. "DISCOE: Distributed Design & Analysis to Preserve Intellectual Property" (hereinafter referred to as "Dieckman"). Applicants respectfully traverse the rejection.

As amended, claim 1 recites "storing a plurality of dynamic parts in a remote parts database, wherein each of said dynamic parts represents an individual electronic component and is associated with a plurality of component data items." Component data items, for example, "may include the manufacturer, part number, availability, electronic properties, number of inputs, outputs, pins, or other properties which may be useful to a designer." (Pg. 14, ll. 20-22). Applicants respectfully submit that Dieckman fails to teach, disclose, or even suggest this claim limitation.

The Office Action cites "The Major Components in DISCOE" section in Dieckman as disclosing the claimed limitation. (Pg. 3, para. 4). However, the portion cited merely discloses that "design data is expressed in SUAVE," which is analyzed on the front-end "into IIR memory-resident data structure of the AIRE/CE standard," and that the "simulation kernel . . . is implemented in Java." (Pg. 58, "The Major Components in DISCOE"). Thus, Dieckman fails to disclose "each of said dynamic parts . . . is associated with a plurality of component data items" as recited in claim 1.

Dieckman also fails to teach, disclose or suggest "embedding a dynamic part from said remote parts database into an application running on the user's computer" as recited in amended claim 1.

Dieckman discloses that in order to protect the intellectual property rights of a vendor, “a remote component is only visible through its external interface that is defined by the IP provider.” (Pg. 60, “Distributed Simulation/IP Preservation”). *See also* pg. 58, “Collaborative Design” (“[T]he distributed simulation only exchanges low-level simulation data [to preserve] the integrity of the vendor’s IP.”). In addition, the “co-design environment itself must . . . be online and accessible remotely (with controlled access to protect the IP of the CAD tool vendor).” (Pg. 57, right column). Thus, Dieckman teaches away from “embedding a dynamic part . . . into an application running on the user’s computer” since such action could compromise the vendor’s intellectual property rights and an online co-design environment cannot be considered “an application running on the user’s computer.” Consequently, Dieckman cannot be relied upon to teach the claimed limitation.

For at least these reasons, Applicants respectfully submit that Dieckman fails to teach each and every limitation of claim 1. Accordingly, it is respectfully submitted that independent claim 1 is allowable over Dieckman. Since claims 2-4, 7, and 11-12 are dependent upon allowable independent claim 1, Applicants respectfully submit that those claims are similarly allowable. Consequently, Applicants request that the rejection under 35 U.S.C. § 102(b) be withdrawn.

Claim 5

Claim 5 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dieckman in view of what was known to one of ordinary skill in the art at the time the invention was made. However, since Dieckman fails to teach, disclose, or suggest every limitation of claim 1, claim 5, which is dependent from claim 1, cannot be considered obvious in view of Dieckman and what was known to one of ordinary skill in the art at the time the invention was made. Hence, claim 5 should be in condition for allowance as well.

Claims 8-10 and 13

Claims 8-10 and 13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dieckman in view of Walker et al. (U.S. Patent No. 5,862,223). Walker is directed to “an expert matching method and apparatus for managing communications between an expert having particular qualifications and an end user seeking a solution to an expert request.” (Abstract). Putting aside the issue of whether Walker teaches the specific recitations of claims 8-10 and 13, it is clear that Walker fails to remedy the deficiencies of Dieckman. That is, Walker does not disclose “storing a plurality of dynamic parts in a remote parts database, wherein each of said dynamic parts represents an individual electronic component and is associated with a plurality of component data items” or “embedding a dynamic part from said remote parts database into an application running on the user’s computer” as recited in claim 1. Since neither Dieckman nor Walker teach or suggest each and every limitation of claim 1, the combination of the two also fails to teach each and every limitation of claim 1. For at least these reasons, Dieckman, Walker, or any combination of the two fails to disclose each and every limitation of claims 8-10 and 13, which are dependent from claim 1.

Applicants further note that in order to establish a prima facie case of obviousness under 35 U.S.C. § 103(a), “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings.” MPEP § 2143. Applicants respectfully note that both Dieckman and Walker are absent any teaching or motivation for combination with one another. Moreover, Applicants respectfully note that the Office Action has not cited any portion of Dieckman or Walker which contains a teaching, suggestion, or motivation for combination in rejecting the pending claims. Absent a showing of a teaching or suggestion to combine the teachings or suggestions, a rejection under 35 U.S.C. § 103(a) is inappropriate hindsight-based analysis. MPEP § 2145. Accordingly, Applicants respectfully submit that a rejection of claims 8-10 and 13 under 35 U.S.C. § 103(a) is improper without such a showing.

Claims 14-17 and 19-22

Claims 14-17 and 19-22 have been rejected for the same reasons as cited in the rejection of claims 1-5 and 7-13. The Office Action states that "[c]laims 14-22 are apparatus claims that correspond to the method claims 1-13." Since claims 1-5 and 7-13 are allowable, claims 14-17 and 19-22, which corresponds to those claims, are similarly allowable.

Conclusion

On the basis of the above remarks, reconsideration and allowance of the claims is believed to be warranted and such action is respectfully requested. If the Examiner has any questions or comments, the Examiner is invited to contact the undersigned at the number listed below.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES

In the Specification

The paragraph on page 9, line 24, is amended as follows:

FIG. 5 is a flow chart showing the design and utilization flow over of the system [of]in FIG. 4.

The paragraph on page 12, lines 6-17, is amended as follows:

Referring now to FIG. 2, there is shown a schematic illustration of a simplified integrated circuit 200 that may be represented by virtual circuit design data stored in the layout database 195. In actual, more realistic integrated circuit designs, the integrated circuit 200 would be far more complicated. However, FIG. 2 is useful for purposes of illustration. As shown therein, the integrated circuit 200 comprises of a plurality of control regions 201, datapath regions 203, and memory 205. The various control regions 201, datapath regions 203 and memory 205 are interconnected with databuses 207 generally spanning multiple bits. Each datapath region 203 may comprise a plurality of datapath functions 209. A datapath function 209 may utilize some or all of the bits available from the databus 207. A datapath function [309]209 may comprise a plurality of cell instances 215 which enable some form of signal or logic transformation of the data passed by the databus 207. The cell instance 215 within a datapath function 209 generally operates on the data carried on the datapath function 209.

The paragraph starting on page 16, line 24, and ending on page 17, line 3, is amended as follows:

In a preferred embodiment, the user can also conduct a search of the remote parts database 402 to find an electronic component having certain desired properties – for example, a resistor having a specific resistance value. Standard database search tools may be utilized for this purpose. The user may, for example, interactively enter the component type, the desired value (or range of values), and any other distinguishing information or characteristics at the user workstation 403, and commence a search of the remote parts database 402. The search results are returned to the user workstation 403 and displayed,

allowing the user to peruse the search results in the same manner as the initially displayed dynamic parts listing.

The paragraph on page 17, lines 4-12, is amended as follows:

Whether or not the user conducts a search, the user may browse through the displayed dynamic parts 460 to determine whether any of them would be beneficial to the user's circuit design. Profile information regarding the designer and/or the particular schematic design, among other items, may be stored in a user profile at the remote parts database 402 and used to assist in selection of appropriate electronic components. Likewise, metrics data regarding other designers having similar designs may be stored in a metrics server and used to assist in selection of appropriate electronic components. Use of such profiling and metrics routines is disclosed in greater detail in commonly-assigned and co-pending U.S. Patent Application Ser. No. 09/514,757 [(Attorney Docket 247/237)]filed concurrently herewith, hereby incorporated by reference as if set forth fully herein.

The paragraph on page 18, lines 7-24, is amended as follows:

In a next step [210]610, the user inserts the selected dynamic part 460 into a design within the schematic program 404. In a preferred embodiment, the user clicks on the desired dynamic part 460 with a computer mouse and places the part into the design within the schematic program 404. This placing action has the effect of transmitting a copy of the dynamic part 460 over the Internet 450 into the design within the schematic program 404. Mechanisms for moving an item that appears on a computer screen and copying over data associated with the item (e.g., dragging and dropping) are well known to those skilled in the art. After the dynamic part 460 has been placed into the design within the schematic program 404, the dynamic part 460 may then be manipulated within the schematic program 404 in the same manner as any other graphical icon or symbol used within the schematic program 404. Once placed in the design, the selected dynamic part 460 preferably has the functionality within the schematic program 404 according to the type and value of part, similar to other types of standard graphical components or

symbols used in such schematic program 404 in the prior art. Referring to FIG. [5]6, a design within the schematic program 404 is shown having a number of dynamic parts 460 inserted therein. The dynamic parts 460 may be interconnected within the schematic program in the same fashion that prior art symbols are utilized in similar schematic programs. While, in some embodiments, dynamic parts 460 may be intermixed with standard “non-dynamic” parts within a design, it is advantageous in some applications to have all of the components within a design be dynamic parts 460.

The paragraph starting on page 18, line 25, and ending on page 19, line 5, is amended as follows:

It may be useful in some embodiments for the user to have access to a summary list of which parts within the design are dynamic. A dynamic parts manager (not shown) may thus be provided at the user [computer]workstation 403 whereby the user can obtain a list or other indication of which parts within a design are dynamic. Using the dynamic parts manager, the user may also be provided with the ability to “link” a non-dynamic part to a dynamic part 460 in the remote parts database 402. The act of linking a non-dynamic part to a dynamic part 460 causes the non-dynamic part to take on the attributes of the dynamic part 460 to which it is linked. The non-dynamic part thereby effectively becomes a dynamic part. In such a manner, non-dynamic parts that have already been placed can essentially be converted into dynamic parts.

The paragraph on page 22, lines 16-23, is amended as follows:

After the design has been finalized and the bill of materials has been generated, the parts may then be procured from the appropriate suppliers. An example of a process for procuring electronic components is disclosed in common-assigned U.S. Application Ser. No. 09/514,757 [(Attorney Docket 247/237)]filed concurrently herewith, previously incorporated by reference as if set forth fully herein. The procurement process may involve, for example, the automatic generation of purchase orders for the desired parts in the bill of materials (based on the expected quantity of production), which may be

transmitted in electronic form over the Internet 450 to the appropriate supplier or distributor using the stored links to the supplier or distributor.

In the Claims

Claims 1, 4, 7, 14, 19, and 21-22 is amended as follows:

1. (Amended) A method for selecting electronic components from a remote database over a distributed electronic network, comprising the steps of:

storing a plurality of dynamic parts in a remote parts database, wherein each of said dynamic parts represent[ing]s an individual electronic component and is associated with a plurality of component data items;

connecting a user computer to said remote parts database; and

embedding a dynamic part from said remote parts database into an application running on the user's computer.

4. (Amended) The method of claim 1, further comprising the steps of displaying said dynamic parts graphically on the user's computer, and receiving a selection indication of a dynamic part from [the]a user.

7. (Amended) The method of claim [6]1, further comprising the step of copying said component data items into a local database connected to [said]the user computer upon embedding said dynamic part into the application.

14. (Amended) A system for providing electronic components to users over a distributed electronic network, comprising:

a remote parts database;

a plurality of dynamic parts stored in said remote parts database, wherein each of said dynamic parts represent[ing]s an individual electronic component and is associated with a plurality of component data items; and

a server connected to said remote parts database and to said distributed electronic network, for connecting a user computer to said remote parts database and for transmitting dynamic parts to an application running on the user computer.

19. (Amended) The system of claim [18]14, further comprising a local database connected to the user computer, said local database storing dynamic parts transmitted to the user computer.

21. (Amended) The system of claim [18]14, wherein one or more of said dynamic parts transmitted to the user computer comprises a link to either said remote parts database or another remote database.

22. (Amended) The system of claim [18]14, further comprising a process for generating an electronic bill of materials based on said dynamic parts transmitted to said application on the user computer, said electronic bill of material comprising a link for each dynamic part to either said remote parts database or another remote database.